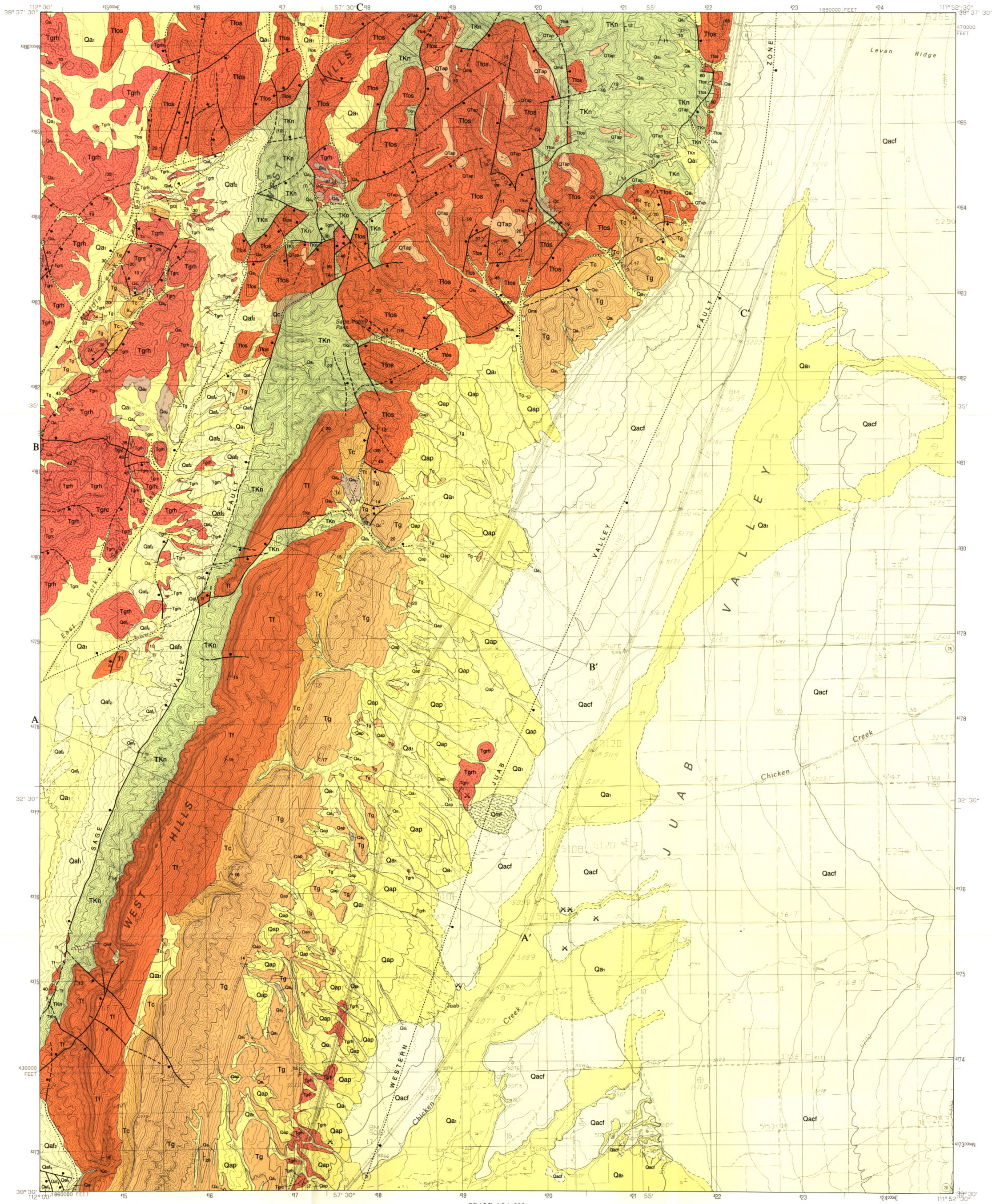
UTAH GEOLOGICAL AND MINERAL SURVEY
a division of
UTAH DEPARTMENT OF NATURAL RESOURCES

Plate 1
Utah Geological and Mineral Survey Map 132
Provisional Geologic Map of the Juab Quadrangle



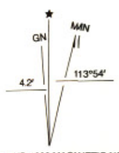
Provisional base map from U.S. Geological Survey, Juab Quadrangle, 1983

SCALE 1:24 000

1 .5 0 1 MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000 FEET
1 .5 0 1 2 KILOMETERS
1000 0 1000 2000 METERS

CONTOUR INTERVAL 20 FEET

Malcolm P. Weiss, Thesis Chairman
J.W. Parker, Cartographer



UTM GRID AND 1990 MAGNETIC NORTH DECLINATION AT CENTEER OF SHEET

PROVISIONAL GEOLOGIC MAP OF THE JUAB QUADRANGLE, JUAB COUNTY, UTAH

by
Donald L. Clark

1990

QUADRANGLE LOCATION

UTAH GEOLOGICAL AND MINERAL SURVEY
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Plate 2
Utah Geological and Mineral Survey Map 132
Provisional Geologic Map of the Juab Quadrangle

DESCRIPTION OF MAP UNITS

Qa₁ — Younger alluvium — *Clay- to boulder-sized detritus, locally derived and deposited along intermittent streams.*

Qa₂ — Older alluvium — *Deposits incised by younger alluvium and of similar composition.*

Qaf₁ — Younger alluvial fans — *Clay- to boulder-sized debris derived from local bedrock, composing coalescing fan system overlying Qaf₂.*

Qaf₂ — Older alluvial fans — *Dissected alluvial apron formed of a coalesced series of fans.*

Qaf₃ — Oldest alluvial fan — *Dissected and faulted, solitary fan containing Flagstaff debris, higher than Qaf₂.*

Qacf — Coalesced alluvial fans — *Extensive coalescing alluvial fan systems (bajadas) of Juab Valley; clay- to boulder-sized material.*

Qap — Younger pediment alluvium — *Thin, gently sloping mantle of clay- to boulder-sized material overlying a truncated bedrock surface.*

QTap — Older pediment alluvium — *Mostly clay, silt, and sand; higher and more dissected than Qap.*

Qc — Colluvium — *Slope cover composed of fallen blocks, talus, boulders, and surficial debris.*

Qmf — Mass movement flow deposits — *Debris flows consisting of North Horn and Flagstaff materials developed on steep slopes; mudflow containing Green River and Flagstaff debris.*

Qms — Mass movement slump deposits — *Small rotational slumps developed on steep slopes in the Green River, Orme Spring Conglomerate, and North Horn Formation.*

Tgr — Goldens Ranch Formation (undifferentiated) — *Shown only on cross sections.*

Tgrs — Sage Valley Limestone Member of the Goldens Ranch Formation — *Yellowish-gray to light-olive-gray limestone with plant remains, chert, vugs, gastropods; interbedded clays.*

Tgrh — Hall Canyon Conglomerate (Meibos, 1983) — *Gray-colored volcanic conglomerate and conglomerate, volcaniclastic sandstone and stiltstone, tuffaceous sandstone, tuff, and bentonitic clay.*

Tgrc — Chicken Creek Tuff Member of the Goldens Ranch Formation — *Light-gray to grayish-pink ash-flow tuff with biotite, pumice lapilli; K/Ar dated.*

Tg — Green River Formation — *Interbedded moderate-greenish-yellow and gray mudstone, and platy yellowish-gray fossiliferous limestone, bentonitic at top; orange, brown, and gray conglomerate, mudstone, sandstone, siltstone; green mudstone, yellowish-gray to light-olive-gray limestone.*

Tc — Colton Formation — *Moderate-reddish-orange and brown, and pale-red mudstone, sandstone, conglomerate; mottled carbonates.*

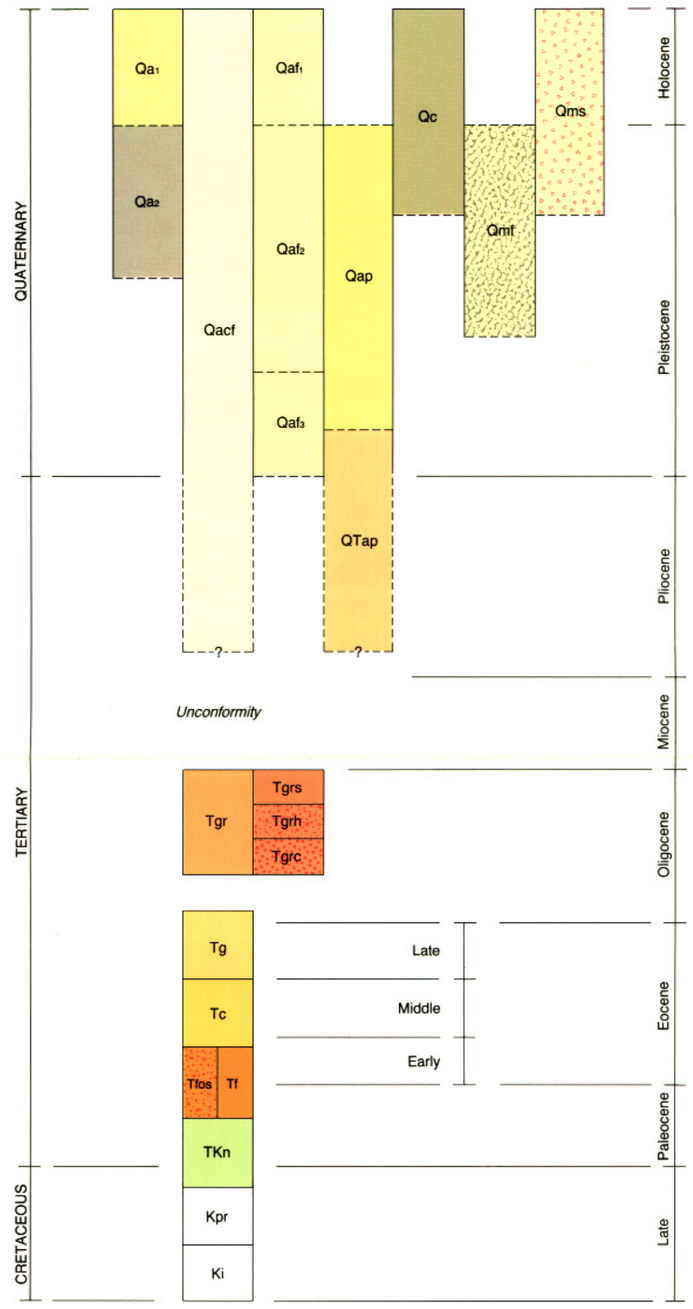
Tf — Flagstaff Formation — *Pastel-colored limestone and dolomite; multicolored mudstone and siltstone, sandstone, conglomerate. Exposures in southern and central portions of the quadrangle.*

Tfos — Orme Spring Conglomerate — *Pink and white conglomerate, mudstone, and lesser siltstone and calcareous sandstone. Exposures in northern portion of the quadrangle.*

TKn — North Horn Formation — *Moderate-reddish-orange and brown conglomerate, mudstone, sandstone, siltstone; oncolites and gastropods.*

Kpr (Price River Formation) and Ki (Indianola Group) shown on cross section only.

CORRELATION OF MAP UNITS



SYSTEM	SERIES (STAGE)	FORMATION		SYMBOL	THICKNESS Feet (Meters)	LITHOLOGY
QUATERNARY	Holocene Pleistocene	surficial deposits		Q	0-3000 (0-915)	
TERTIARY	Oligocene	Goldens Ranch Formation	Sage Valley Limestone Member	Tgrs	0-100 (0-31)	
			Hall Canyon Conglomerate Member	Tgrh	0-400+ (0-122+)	
			Chicken Creek Tuff Member	Tgrc	0-640+ (0-195+)	
	? Eocene	Green River Formation		Tg	900 ± (274±)	
		Colton Formation		Tc	214-260 (65-79)	
	? Paleocene	Orme Spring Conglomerate	Flagstaff Formation	Tfos Tf	482-650 (147-198)	
		North Horn Formation		TKn	1120+ (342+)	
CRET.	? (Maas.)					

MAP SYMBOLS

- CONTACT — Dashed where approximate.
- NORMAL FAULT — Dashed where inferred, dotted where concealed; bar and ball on downthrown side.
- SPRING
- STRIKE AND DIP OF BEDDING — In parentheses where approximate.
- GRAVEL PIT
  - active
  - abandoned
- OPEN PIT